

What is claimed is:

1. A medical article comprising:
a backing comprising a plurality of terminal portions extending
5 outwardly from a central portion, wherein each terminal portion of the plurality
of terminal portions tapers towards a tip located distal from the central portion,
wherein each terminal portion of the plurality of terminal portions comprises two
edges leading to the tip, the two edges defining an included angle of about 90
degrees or less; and
10 a stretch removable pressure sensitive adhesive layer disposed on the
backing.
2. The medical article of claim 1, wherein the included angle defined by the
two edges of each terminal portion of the plurality of terminal portions is about
15 30 degrees or more.
3. The medical article of claim 1, wherein the two edges of each terminal
portion of the plurality of terminal portions comprise two straight edges.
- 20 4. The medical article of claim 1, wherein the tip of each terminal portion of
the plurality of terminal portions comprises a radiused tip.
5. The medical article of claim 1, wherein each terminal portion of the
plurality of terminal portions is connected to the central portion by a leg.
- 25 6. The medical article of claim 5, wherein the leg comprises a leg width that
is equal to a maximum width of the terminal portion.
7. The medical article of claim 5, wherein each terminal portion of the
30 plurality of terminal portions comprises a maximum width located at a junction
between the terminal portion and the leg

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8. The medical article of claim 1, wherein the plurality of terminal portions comprises only one pair of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions. Fig. 12

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9. The medical article of claim 1, wherein the plurality of terminal portions comprises two or more pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions, and further wherein the common axes of two or more pairs of opposing terminal portions are aligned with each other.

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10. The medical article of claim 1, wherein the plurality of terminal portions comprises only two pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions, and further wherein the common axes of the two pairs of opposing terminal portions are intersect each other within the central portion of the backing. (13)

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11. The medical article of claim 10, wherein the common axes are substantially perpendicular.

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12. The medical article of claim 1, further comprising a predefined tab located within the central portion of the backing.

13. The medical article of claim 1, further comprising a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing.

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14. The medical article of claim 1, further comprising a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing, the fold comprising a portion of the stretch removable pressure sensitive adhesive layer.

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15. The medical article of claim 1, further comprising a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing, the fold comprising a base fold line and an outer fold line, and further wherein predefined tab is secured to the backing proximate the outer fold line.

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16. The medical article of claim 1, wherein the plurality of terminal portions comprises only one pair of opposing terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions;

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and wherein the medical article further comprises a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing, the fold defining a fold axis that intersects the common axis of the pair of opposing terminal portions.

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17. The medical article of claim 16, wherein the fold axis is perpendicular to the common axis.

18. The medical article of claim 1, wherein the plurality of terminal portions comprises two or more pairs of opposing terminal portions, each pair of opposing terminal portions comprising two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions;

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and wherein the medical article further comprises a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing, the fold defining a fold axis that intersects the

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common axis of each pair of the two or more pairs of opposing terminal portions.

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19. The medical article of claim 1, wherein the stretch removable adhesive layer comprises a nonwoven web of pressure sensitive adhesive fibers, wherein each of the fibers comprises:

a pressure sensitive adhesive component comprising a crosslinked acrylate copolymer, wherein the crosslinked acrylate copolymer comprises copolymerized monomers comprising at least one monoethylenically unsaturated alkyl (meth)acrylate monomer, at least one monoethylenically unsaturated free-radically copolymerizable reinforcing monomer having a homopolymer glass transition temperature higher than that of the alkyl (meth)acrylate monomer; and a reinforcing material comprising a metallocene-catalyzed polyolefin within the pressure sensitive adhesive component.

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anticipated by claim 10 of 09/847942

20. The medical article of claim 19, wherein the crosslinked acrylate copolymer is derived from a melt-processable acrylate copolymer and a crosslinking agent. claim 11 of '942 application

- 20 21. The medical article of claim 20, wherein the crosslinking agent is a styrene macromer. claim 12 of '942 application

styrene is a vinyl aromatic compound

22. The medical article of claim 19, wherein the backing comprises an extensible nonwoven web comprising fibers having at least two substantially continuous layers throughout the fiber length, wherein the layers comprise at least one first layer of a low modulus material and at least one second layer of a relatively nonelastic higher modulus material capable of undergoing substantial permanent deformation. reads on claim 28 of the '942 application

- 30 23. A medical article comprising:
a backing comprising a plurality of terminal portions extending outwardly from a central portion, wherein each terminal portion of the plurality

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of terminal portions tapers towards a tip located distal from the central portion, wherein each terminal portion of the plurality of terminal portions comprises two edges leading to the tip, the two edges defining an included angle of about 90 degrees or less, and further wherein the included angle defined by the two edges is about 30 degrees or more;

a stretch removable pressure sensitive adhesive layer disposed on the backing; and

a predefined tab located within the central portion of the backing, wherein the predefined tab comprises a fold in the backing, and further wherein the fold comprises a base fold line and an outer fold line, and further wherein the predefined tab is secured to the backing proximate the outer fold line;

wherein the plurality of terminal portions comprises one or more pairs of opposing terminal portions, each pair of opposing terminal portions comprising two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions.

24. A medical article comprising:

a backing comprising a plurality of terminal portions extending outwardly from a central portion;

a stretch removable pressure sensitive adhesive layer disposed on the backing; and

wherein each terminal portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;

wherein each terminal portion of the plurality of terminal portions tapers towards the tip such that each terminal portion of the plurality of terminal portions comprises a setback width measured at a setback distance of 5 millimeters towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 10 millimeters or less when measured perpendicular to the longitudinal axis, and further wherein the setback width is

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common axes of two or more pairs of opposing terminal portions are aligned with each other.

5 31. The medical article of claim 24, wherein the plurality of terminal portions comprises two pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the opposing terminal portions, and further wherein the common axes of the two pairs of opposing terminal portions are intersect each other within the
10 central portion of the backing.

32. The medical article of claim 31, wherein the common axes are substantially perpendicular.

15 33. The medical article of claim 24, wherein the stretch removable adhesive layer comprises a nonwoven web of pressure sensitive adhesive fibers, wherein each of the fibers comprises:

20 a pressure sensitive adhesive component comprising a crosslinked acrylate copolymer, wherein the crosslinked acrylate copolymer comprises copolymerized monomers comprising at least one monoethylenically unsaturated alkyl (meth)acrylate monomer, at least one monoethylenically unsaturated free-radically copolymerizable reinforcing monomer having a homopolymer glass transition temperature higher than that of the alkyl (meth)acrylate monomer; and
25 a reinforcing material comprising a metallocene-catalyzed polyolefin within the pressure sensitive adhesive component.

34. The medical article of claim 33, wherein the crosslinked acrylate copolymer is derived from a melt-processable acrylate copolymer and a crosslinking agent.

30 35. The medical article of claim 34, wherein the crosslinking agent is a styrene macromer.

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about 2.5 millimeters or more when measured perpendicular to the longitudinal axis.

25. The medical article of claim 24, wherein the setback width is about 6 millimeters or more when measured perpendicular to the longitudinal axis, and further wherein the setback width is about 8 millimeters or less when measured perpendicular to the longitudinal axis.

26. The medical article of claim 24, wherein each terminal portion of the plurality of terminal portions is connected to the central portion of the backing by a leg, and further wherein the maximum width of each terminal portion of the plurality of terminal portions is located at a junction between the terminal portion and the leg.

27. The medical article of claim 24, wherein each terminal portion of the plurality of terminal portions comprises two straight edges leading to the tip.

28. The medical article of claim 24, wherein the tip of each terminal portion of the plurality of terminal portions comprises a radiused tip.

29. The medical article of claim 24, wherein the plurality of terminal portions comprises only one pair of opposing terminal portions, wherein the pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions.

30. The medical article of claim 24, wherein the plurality of terminal portions comprises two or more pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions, and further wherein the

36. The medical article of claim 33, wherein the backing comprises an extensible nonwoven web comprising fibers having at least two substantially continuous layers throughout the fiber length, wherein the layers comprise at least one first layer of a low modulus material and at least one second layer of a relatively nonelastic higher modulus material capable of undergoing substantial permanent deformation.

claim 28 of 1942 application

37. A medical article comprising:

a backing comprising at least first and second terminal portions extending outwardly from a central portion;

a stretch removable pressure sensitive adhesive layer disposed on the backing; and

wherein each terminal portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;

wherein each terminal portion of the plurality of terminal portions tapers towards the tip such that each terminal portion of the plurality of terminal portions comprises a setback width measured at a setback distance that is 25% of the maximum width towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 60% or less of the maximum width when measured perpendicular to the longitudinal axis, and further wherein the setback width is about 10% or more of the maximum width when measured perpendicular to the longitudinal axis.

38. The medical article of claim 37, wherein the setback width is about 30% or more of the maximum width when measured perpendicular to the longitudinal axis, and further wherein the setback width is about 45% or less of the maximum width when measured perpendicular to the longitudinal axis.

39. The medical article of claim 37, wherein each terminal portion of the plurality of terminal portions is connected to the central portion of the backing by a leg, and further wherein the maximum width of each terminal portion of the plurality of terminal portions is located at a junction between the terminal portion and the leg.

40. The medical article of claim 37, wherein each terminal portion of the plurality of terminal portions comprises two straight edges leading to the tip.

41. The medical article of claim 37, wherein the tip of each terminal portion of the plurality of terminal portions comprises a radiused tip.

42. The medical article of claim 37, wherein the plurality of terminal portions comprises only one pair of opposing terminal portions, wherein the pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions.

43. The medical article of claim 37, wherein the plurality of terminal portions comprises two or more pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the pair of opposing terminal portions, and further wherein the common axes of two or more pairs of opposing terminal portions are aligned with each other.

44. The medical article of claim 37, wherein the plurality of terminal portions comprises two pairs of opposing terminal portions, wherein each pair of opposing terminal portions comprises two terminal portions located on opposite sides of the central portion and aligned along a common axis extending through the tips of the opposing terminal portions, and further wherein the common axes

of the two pairs of opposing terminal portions are intersect each other within the central portion of the backing.

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5 45. The medical article of claim 44, wherein the common axes are substantially perpendicular.

46. The medical article of claim 37, wherein the stretch removable adhesive layer comprises a nonwoven web of pressure sensitive adhesive fibers, wherein each of the fibers comprises:

10 a pressure sensitive adhesive component comprising a crosslinked acrylate copolymer, wherein the crosslinked acrylate copolymer comprises copolymerized monomers comprising at least one monoethylenically unsaturated alkyl (meth)acrylate monomer, at least one monoethylenically unsaturated free-radically copolymerizable reinforcing monomer having a homopolymer glass
15 transition temperature higher than that of the alkyl (meth)acrylate monomer; and a reinforcing material comprising a metallocene-catalyzed polyolefin within the pressure sensitive adhesive component. Claim 19 of 1942

20 47. The medical article of claim 46, wherein the crosslinked acrylate copolymer is derived from a melt-processable acrylate copolymer and a crosslinking agent. Claim 11 of 1942

48. The medical article of claim 47, wherein the crosslinking agent is a styrene macromer. Claim 12 of 1942

25 49. The medical article of claim 46, wherein the backing comprises an extensible nonwoven web comprising fibers having at least two substantially continuous layers throughout the fiber length, wherein the layers comprise at least one first layer of a low modulus material and at least one second layer of a
30 relatively nonelastic higher modulus material capable of undergoing substantial permanent deformation. Claim 21 of 1942

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50. A method of removing a medical article from skin, the method comprising:

providing a medical article adhered to skin, wherein the medical article comprises:

5 a backing comprising a plurality of terminal portions extending outwardly from a central portion, wherein each terminal portion of the plurality of terminal portions tapers towards a tip located distal from the central portion, wherein each terminal portion of the plurality of terminal portions comprises two edges leading to the tip, 10 the two edges defining an included angle of about 90 degrees or less; and

a stretch removable pressure sensitive adhesive layer disposed on the backing; and 15 grasping the medical article within the central portion; and stretching the medical article from the central portion to remove the medical article from the skin.

51. The method of claim 50, wherein the medical article further comprises a predefined tab located within the central portion of the backing, and further 20 wherein grasping the medical article comprises grasping the predefined tab; and still further wherein stretching the medical adhesive article further comprises pulling on the predefined tab to stretch the medical article in an amount sufficient to remove the medical article.

25 52. The method of claim 50, wherein the predefined tab comprises a fold in the backing, the predefined tab comprising a base fold line and an outer fold line, and further wherein predefined tab is secured to the backing proximate the outer fold line, and still further wherein the method further comprises releasing the outer fold line from the backing before pulling on the predefined tab.

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53. A method of removing a medical article from skin, the method comprising:

providing a medical article adhered to skin, the medical article

5 comprising:

a backing comprising a plurality of terminal portions extending outwardly from a central portion;

a stretch removable pressure sensitive adhesive layer disposed on the backing; and

10 wherein each terminal portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;

15 wherein each terminal portion of the plurality of terminal portions tapers towards the tip such that each terminal portion of the plurality of terminal portions comprises a setback width measured at a setback distance of 5 millimeters towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 10 millimeters or less when measured perpendicular to the longitudinal axis, and further wherein the setback width is about 2.5 millimeters or more when measured perpendicular to the longitudinal axis; and
20 grasping the medical article within the central portion; and stretching the medical article from the central portion to remove the medical article from the skin.

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54. The method of claim 53, wherein the medical article further comprises a predefined tab located within the central portion of the backing, and further wherein grasping the medical article comprises grasping the predefined tab; and still further wherein stretching the medical adhesive article further comprises
30 pulling on the predefined tab to stretch the medical article in an amount sufficient to remove the medical article.

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55. The method of claim 53, wherein the predefined tab comprises a fold in the backing, the predefined tab comprising a base fold line and an outer fold line, and further wherein predefined tab is secured to the backing proximate the outer fold line, and still further wherein the method further comprises releasing the outer fold line from the backing before pulling on the predefined tab.

56. A method of removing a medical article from skin, the method comprising:

providing a medical article adhered to skin, the medical article comprising:

10 comprising:

a backing comprising at least first and second terminal portions extending outwardly from a central portion;

a stretch removable pressure sensitive adhesive layer disposed on the backing; and

15 wherein each terminal portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;

wherein each terminal portion of the plurality of terminal portions tapers towards the tip such that each terminal portion of the plurality

20 of terminal portions comprises a setback width measured at a setback distance that is 25% of the maximum width towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 60% or less of the maximum width when measured perpendicular to the longitudinal axis, and further wherein the setback

25 width is about 10% or more of the maximum width when measured perpendicular to the longitudinal axis; and

grasping the medical article within the central portion; and

stretching the medical article from the central portion to remove the

30 medical article from the skin.

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57. The method of claim 56, wherein the medical article further comprises a predefined tab located within the central portion of the backing, and further wherein grasping the medical article comprises grasping the predefined tab; and still further wherein stretching the medical adhesive article further comprises

5 pulling on the predefined tab to stretch the medical article in an amount sufficient to remove the medical article.

58. The method of claim 56, wherein the predefined tab comprises a fold in the backing, the predefined tab comprising a base fold line and an outer fold line,

10 and further wherein predefined tab is secured to the backing proximate the outer fold line, and still further wherein the method further comprises releasing the outer fold line from the backing before pulling on the predefined tab.

59. A method of making a medical article, the method comprising:

15 providing a backing;

applying a stretch removable pressure sensitive adhesive to a major surface of the backing;

converting the backing and the stretch removable pressure sensitive adhesive layer to form each medical article comprising a plurality of terminal

20 portions extending outwardly from a central portion, wherein each terminal portion of the plurality of terminal portions tapers towards a tip located distal from the central portion, wherein each terminal portion of the plurality of terminal portions comprises two edges leading to the tip, the two edges defining an included angle of about 90 degrees or less.

25 60. A method of making a medical article, the method comprising:

providing a backing;

applying a stretch removable pressure sensitive adhesive to a major surface of the backing;

30 converting the backing and the stretch removable pressure sensitive adhesive layer to form each medical article comprising a plurality of terminal portions extending outwardly from a central portion, wherein each terminal

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portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;

wherein each terminal portion of the plurality of terminal portions tapers
5 towards the tip such that each terminal portion of the plurality of terminal portions comprises a setback width measured at a setback distance of 5 millimeters towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 10 millimeters or less when measured perpendicular to the longitudinal axis, and further wherein the setback width is
10 about 2.5 millimeters or more when measured perpendicular to the longitudinal axis.

61. A method of making a medical article, the method comprising:
providing a backing;
15 applying a stretch removable pressure sensitive adhesive to a major surface of the backing;
converting the backing and the stretch removable pressure sensitive adhesive layer to form each medical article comprising a plurality of terminal portions extending outwardly from a central portion, wherein each terminal
20 portion of the plurality of terminal portions comprises a longitudinal axis, a tip located distal from the central portion of the backing along the longitudinal axis, a maximum width measured perpendicular to the longitudinal axis;
wherein each terminal portion of the plurality of terminal portions tapers towards the tip such that each terminal portion of the plurality of terminal
25 portions comprises a setback width measured at a setback distance that is 25% of the maximum width towards the central portion from the tip along the longitudinal axis, wherein the setback width is about 60% or less of the maximum width when measured perpendicular to the longitudinal axis, and further wherein the setback width is about 10% or more of the maximum width
30 when measured perpendicular to the longitudinal axis.